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TWO HOME-MADE TRAPS FOR ENGLISH SPARROWS

Prepared in the Denver Wildlife Research Laboratory
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INTRODUCTION

The English sparrow was introduced into America in 1850, and is now well distributed over nearly all of the United States and southern Canada. It spread rapidly from the widely scattered original plantings, showing marked ability to adapt itself quickly to almost any situation. It has no song, is noisy, hardy, and belligerent, has a high rate of reproduction, and due to much city dwelling and habitual shelter-taking probably suffers slight losses from natural enemies. It defiles buildings, ornamental trees, and shrubs with its excrement and sometimes with its bulky nests. The English sparrow does not manifest some of these objectionable traits, however, to the extent it did in the heyday of its spread, and the species is not so common in cities, particularly in the East, as it was a few decades ago.

Coues (1879), Barrows (1889), Dearborn (1912), Forbush (1915), Kalmbach (1930), and others have discussed the habits, economic status, and control of the species. This leaflet summarizes briefly some of the habits of the bird and deals directly with two easily constructed traps useful in its control.

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ECONOMIC STATUS

Kalmbach has shown that the species is essentially vegetarian, more than 96 percent of the food of the adults being composed of mixed poultry and livestock feeds, grains of various kinds, weed seeds, and garden products. The nestlings are fed to a considerable extent upon insects for about only 10 to 12 days, after which they become as vegetarian as the adults.

That sparrows eat large quantities of weed seeds, is one of their favorable habits. In some localities they have proved valuable as destroyers of certain insect pests through mass action by dense local populations. This is particularly true during the nesting season, when the commendable food habits of the nestling sparrows improve the economic status of the species.

At other times, however, the English sparrow does considerable damage to cherries, grapes, berries, and other small fruits and also attacks the buds and blossoms of cultivated trees, vines, and shrubs. In the garden it eats seeds as they ripen and destroys tender garden plantlets as they appear above ground. It sometimes interferes with certain useful songbirds by usurping their nesting sites.

PREVENTION OF DAMAGE

Reasonable time and effort given to methods of preventing damage will frequently save much labor in control operations. Careless handling of poultry feeds and grain furnishes the birds with a lavish food supply. Crevices in and about buildings, vines on buildings and trees, evergreen hedges, trees, and ornamentals provide the birds with nesting sites and roosting shelter. Some of these facilities may be decreased. The abundance of sparrows about a property may be attributed to some definite cause, the elimination of which will diminish their population.

LOCALIZATION FAVORABLE TO CONTROL

The English sparrow is widely distributed as a species, but the activities of individuals and flocks are usually confined to a very restricted range. This fact is favorable to control, for when an area has been cleared of the birds, considerable time usually elapses before it is reinhabited.

METHODS OF CONTROL

Several means have proved effective in English sparrow control. Destroying the nests and eggs at intervals of 10 to 12 days throughout the nesting period sometimes will completely eliminate a local population. Shooting with fine shot from a small-calibre gun has a very definite place in the control program. Control by means of poisoned grains is widely attempted; in general, successful use of this method depends upon careful attention to detail and upon relative scarcity of natural foods. In many

localities shooting is impossible, and poisoned baits are impractical or undesirable, or both. In such places sparrow populations may be kept at low levels by the persistent use of traps.

TRAPPING SPARROWS

Sparrow traps may be home-made, and anyone with a moderate degree of skill can make traps that will cost little and operate successfully. Traps may be of two types: Nest-box traps, which will materially assist in reducing the population during the nesting season; and bait traps, which can be used at any time.

NEST-BOX TRAP

A nest-box trap, as its name implies, looks like an ordinary nest box. The weight of a bird entering such a trap puts into operation a mechanism that catches the bird and sets the trap for another. A number of devices accomplish this. In designing a nest-box trap one should bear in mind that English sparrows, like other birds, dislike drafty quarters, and that a mechanism delicate enough to be operated by a sparrow's weight is likely to get out of order unless the parts are few and well protected from the weather.

Probably the simplest nest-box trap yet designed is the one illustrated by plate 1, A 1/. The trap here described is a modification of one invented by Charles H. Tesch, of Milwaukee, Wis., who furnished the plans and placed at our disposal the results of his experiments. With his trap, sparrows, bent on finding a home, were caught by Mr. Tesch as fast as they came along. The essential parts of the trap are: (1) a box, (2) a tipping chamber within the box, (3) a down spout below it, and (4) a bag at the lower end of the down spout. The dimensions of the several parts are given in plate 1, B. The tipping chamber is made of tin, the down-spout of wood or tin, the box of wood. The roof board is cleated across the ends, and also lengthwise between the cross cleats, for the attachment of the sides, as shown in plate 1, B. The close weave of a 2-bushel bag makes it suitable for the lower end of the down spout. One of coarser fabric would allow a draft through the spout and thus detract from the efficiency of the trap. In building this trap the front wall is the last piece to go in place. It is fastened there by screws, so the trap can easily be overhauled. It is well to fasten with shellac a few feathers or bits of hay to the floor of the tipping chamber near the rear end to excite the interest of sparrows and hasten their entrance.

1/ All illustrations mentioned in the text will be found on the last three pages of this leaflet.

Operating the Nest-Box Trap

The nest-box trap is fastened to a post or pole, or to the side of a building. It must be placed where the receiving sack will hang freely and be easily accessible, so that the sparrows can be removed frequently.

BAIT TRAP

Selection of a bait trap depends somewhat upon the conditions under which it is to be used. Where food is plentiful, sparrows have little incentive to enter a trap, and under such conditions, so as not to excite suspicion, a trap to be effective must be simple. When extensive trapping is attempted it is important that the traps be certain and prompt in action, portable, and cheap. All of these requirements are met by what is known as the "funnel trap," which has no loose parts to become disarranged and requires no tools to keep it in order. Although somewhat bulky, it weighs little and when painted green or gray is inconspicuous.

Funnel Trap

The funnel trap (plate 1, C) is a development of the Newton trap used for sparrows and rats in Europe, and the principle involved is simple. The birds, decoyed by bait scattered in front of and inside the trap, enter the first of two chambers by passing through a small opening at the apex of the half funnel forming the entrance (No. 15 in plate 2, A). The size of this aperture may be adjusted by means of a set of six flexible wires woven into or soldered to the tip of this half cone. In their efforts to escape from the first chamber the birds find their way through the small opening at the apex of the inner funnel (No. 16 in plate 2, A), which is situated above the floor of the trap. When they finally drop to the floor of the second compartment, escape is practically impossible, since they will find the point of entry only by chance. A small door in the second chamber permits removal of the captured birds.

The funnel trap may be readily constructed by anyone handy with tools. It should be made of 3/4-inch-mesh, galvanized poultry wire and, to make it rigid, should be reinforced along all edges and about the door with No. 8 or No. 10 wire.

Plates 2,B; 2,C; and 3,A, and the following description show how to construct a funnel trap either 3 or 4 feet long.

The patterns, in plates 2, B and C, and 3, A, are for making a trap 3 feet long, 1-1/2 feet wide, and 1 foot high. Paper patterns for the two funnels can be made by first drawing the concentric circles, as shown in plate 2,B, and 2,C, and then laying off the straight lines, beginning with the longest. The wavy outline indicates that the pattern is to be cut at least an inch outside of the straight lines to allow an overlap for fastening the cones to the sides and top of the trap. The second chamber and the angles between the first funnel and the walls of the antechamber are floored with netting.

The numbers at the angles in plate 2, B and C correspond with those in plate 2, A, which shows in outline the relation of the different parts as they appear when assembled. Plate 3, A shows how a trap 3 feet long may be cut from a piece of netting 6 feet long and 4 feet wide. The full lines indicate where the netting is to be cut and the broken lines where it is to be bent.

Where sparrows are numerous, a larger trap is recommended. One 4 feet long, 2 feet wide, and 15 inches high can be made from a piece of netting 10 feet long by 4 feet wide, as shown in plate 3, B. Paper patterns for the funnels can be cut out in the manner described for the smaller trap.

To remove the sparrows from a funnel trap the receiving box shown in plate 3, C will be found useful. It should be about 6 inches square and 18 inches long, inside measurements. The door, hinged at the bottom and made to turn inward, is controlled by the part of its wire frame that is extended through the side of the box and formed into a handle. The box as it appears in the illustration is ready to be placed before the open door of the trap from which the sparrows are to be driven.

Operating the Funnel Trap

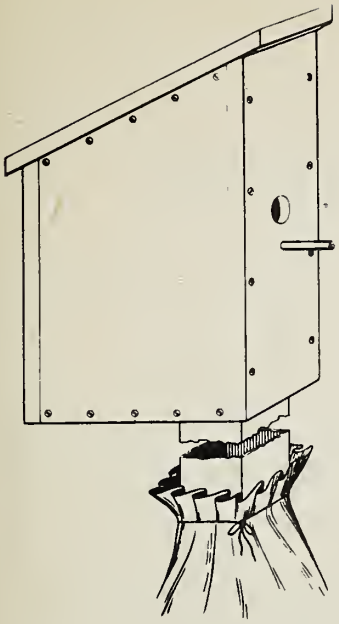
Usually there will be a number of places about the property infested by the sparrows where they are accustomed to gather on the ground or in low shrubbery. The ground should be scraped clear of vegetation and leveled so that the trap will set firmly. As trapping progresses the sparrows will become suspicious, and when this occurs the trap should be moved to another favored spot.

Bait should be scattered in liberal quantity inside the trap and sparingly in front of the entrance. The bait in front of the entrance funnel must be renewed at frequent intervals. Use the type of food to which the sparrows are already accustomed in the locality; whole small grains, cracked grains, commercial poultry scratch feeds, weed seeds, and bread crumbs are all excellent bait materials. In rainy or damp weather it will frequently be necessary to replace all bait material both inside and outside the trap.

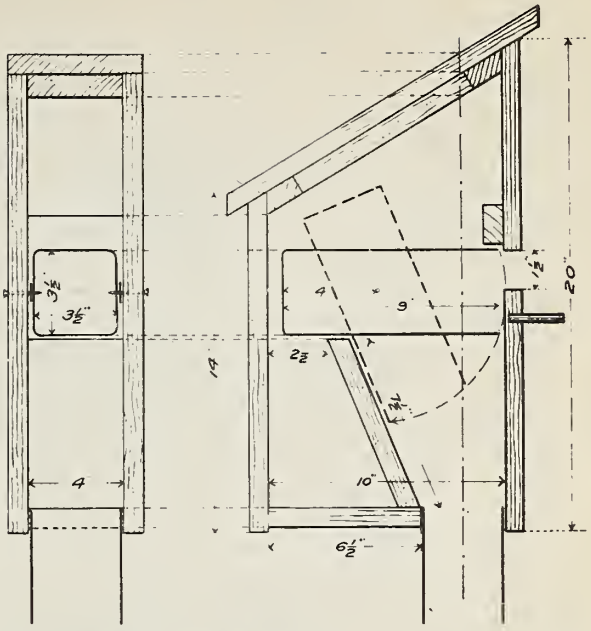
A live sparrow left in the trap as a decoy will facilitate the catching of other sparrows. However, the trap should be emptied at least once a day, since when a number of sparrows enter the trap their efforts to escape tend to frighten those outside. This trap may be used at any time of year but is especially successful during middle and late summer when young sparrows are shifting for themselves but have not acquired the caution of the adults. Trapping is also successful whenever the natural food supply is low.

LIBERATING PROTECTED SPECIES

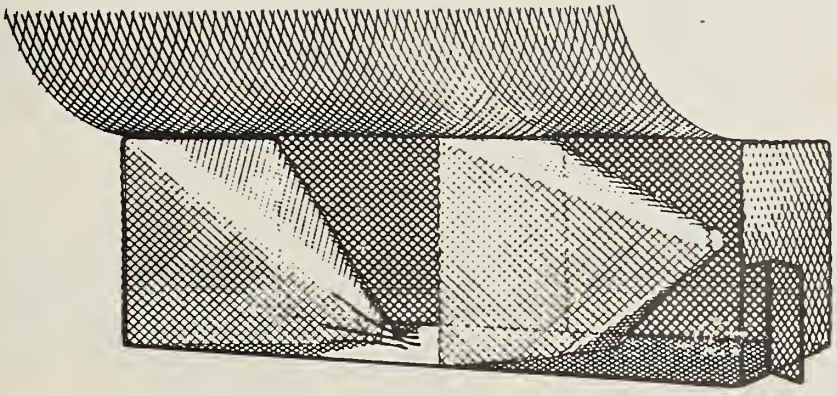
Birds of a number of ground-feeding species may frequently be caught in traps set for English sparrows. Among them are a number of native wild sparrows, titmice, chickadees, and various other birds of similar size. Of the species usually caught in a trap of this type, the English sparrow is the only one generally considered a fit subject of control. Nearly all the other species that may be caught are protected by Federal and State laws. These birds must be released unharmed, unless justification for the control of the particular species involved has already been produced and permission obtained from State and Federal authorities.



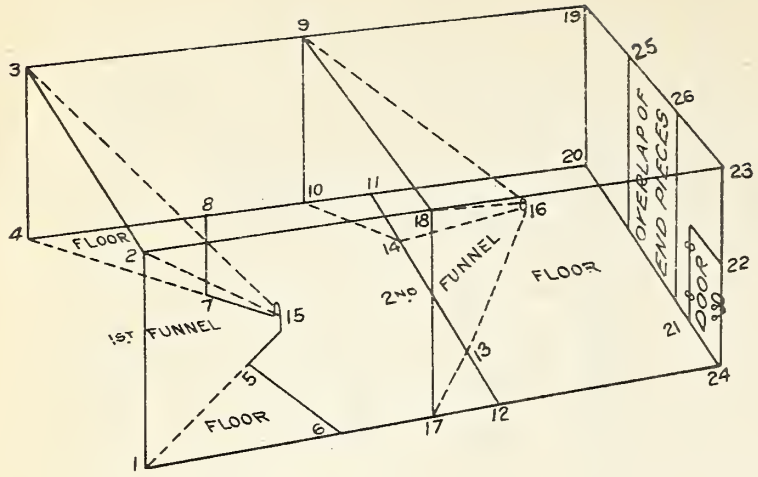
A, Tesch nest-box trap.



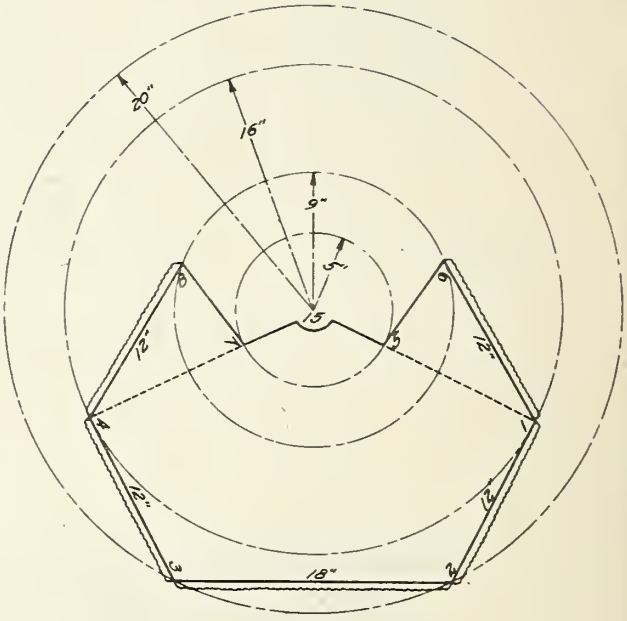
B, Sections showing construction of Tesch nest-box trap.



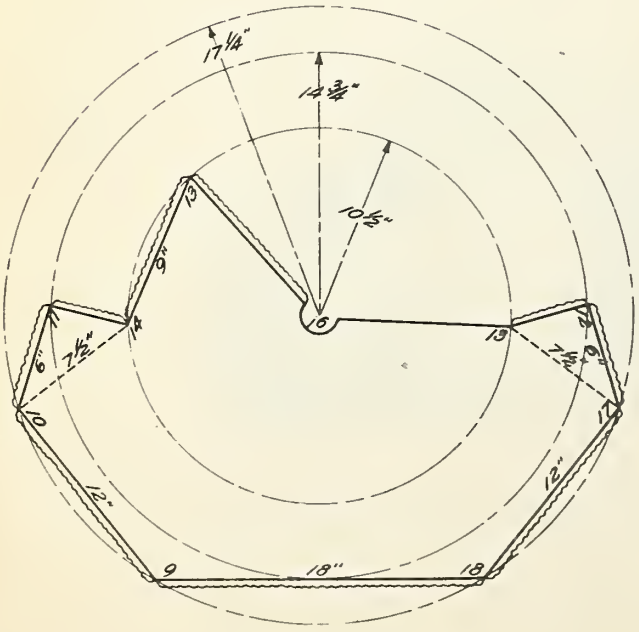
C, Funnel trap. (Side raised to show interior.)



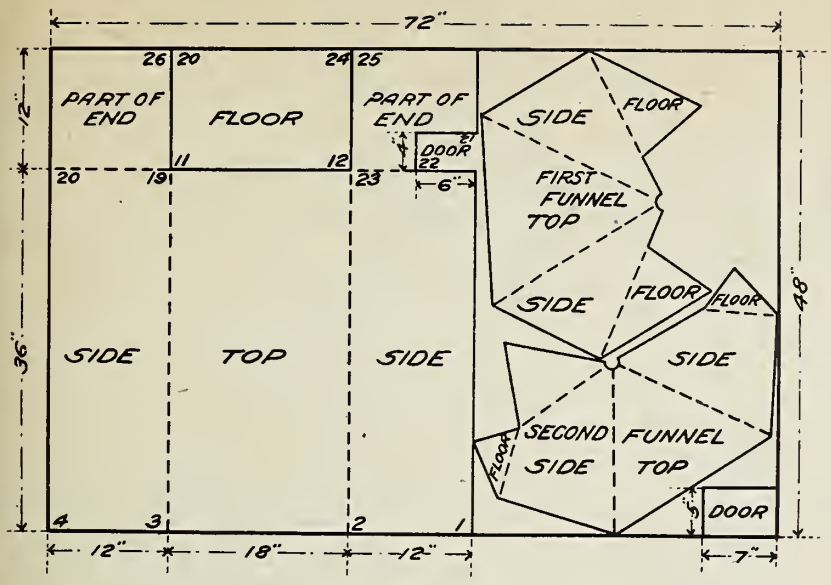
A, Diagram of funnel trap.



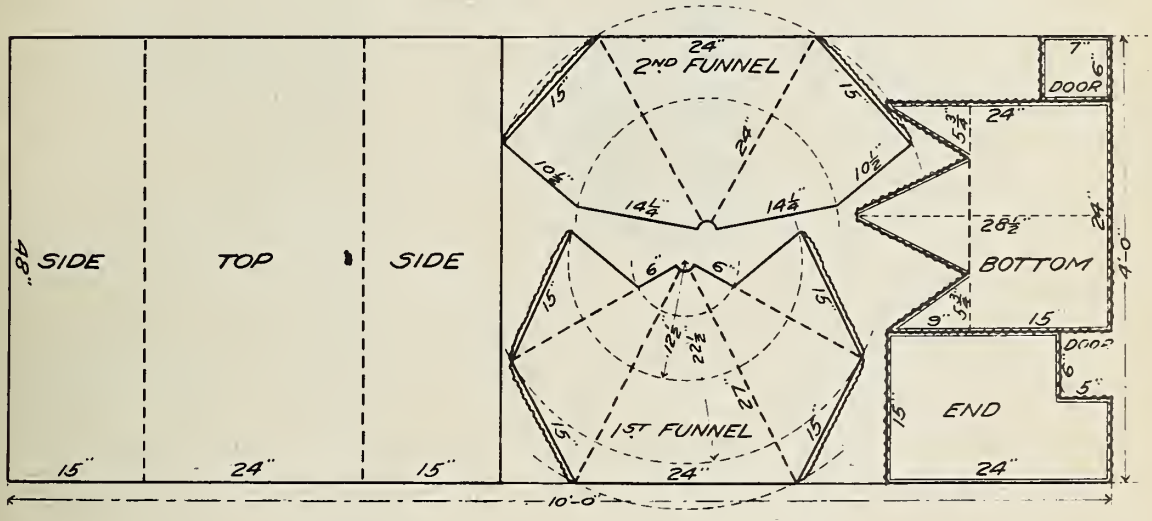
B, Pattern for first funnel of a trap to be 36 x 18 x 12 inches.

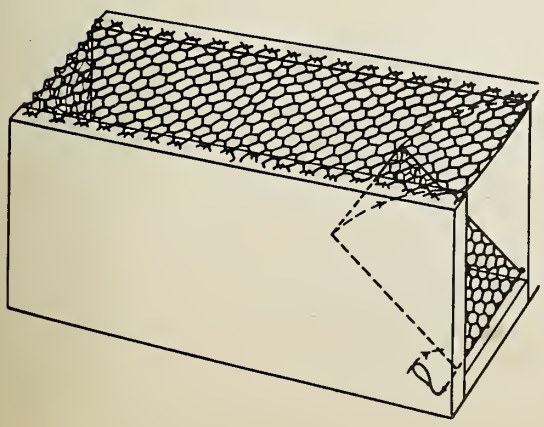


C, Pattern for second funnel of a trap of same size as in B.



A, Diagram for cutting out from poultry wire parts of a funnel trap 36 x 18 x 12 inches.





B, (above), Diagram for cutting out the parts of a funnel trap 48 x 24 x 15 inches.

C, (left), Receiving box for removing sparrows from traps.